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ABSTRACT

Medical education is undergoing one of its most intense reassessments in a quarter of a century. The current reassessments often have focused on reevaluation of the manner in which basic science and clinical education are provided. This paper aims to identify and illustrate the processes by which members of "MWCOM" (a pseudonym), a medical educational institution, make sense of the pedagogical innovation taking place. The paper provides a descriptive/thematic analysis that lays the foundation for future work which directs attention to the complex and shifting power relationships embedded within the MWCOM culture during the implementation period of this particular innovation diffusion process. Discussing the data from an ethnographic study--a collection of interviews with 18 administrators and faculty members at MWCOM--the paper notes a dramatic emergence of the use of metaphor in the organizational members' narratives and the subsequent use of metaphoric analysis to consider the data. According to the paper, the primary metaphor to emerge from the interview transcripts was "family," with the two strong subthemes of "double bind" and "entropy." The paper discusses in detail these themes and their application by MWCOM members. The paper concludes that it is only by studying how the MWCOM members construct their perceptions of organizational life that the "critical next step" can be taken toward forging a more meaningful look at the often politically charged meaning systems that stifle some organizational members while privileging others. (Contains 65 references. Appendix A provides the interview schedule, and Appendix B presents "Foucault's Ideas on the Micro Processes of Discipline." (NKA)

# Teaching an old system new tricks:
# Organizational members' use of metaphor to make sense of a pedagogical innovation

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## Introduction

Medical education is undergoing one of its most intense reassessments in a quarter of a century. Unlike the changes undertaken in the late 1960s and early 1970s, which were aimed at expanding medical education opportunities to meet selected physician manpower shortages, the current reassessments often have focused on reevaluation of the manner in which basic science and clinical education are provided.

One response to such reappraisals is an alternative model of medical education based upon a pedagogical concept called problem-based learning (PBL)--an instructional method characterized by the use of patient problems as a context for students to learn problem-solving skills and acquire knowledge about the basic and clinical sciences. As Barrows (1985) explains:

> The basic outline of the problem-based learning process is: encountering the problem first, problem-solving with clinical reasoning skills and identifying learning needs in an interactive process, self-study, applying newly gained knowledge to the problem, and summarizing what has been learned (p. 15).

Since its inception at McMaster University in the late 1960s, and despite initial misgivings within the medical education community, PBL has spread steadily across North America, as well as in other parts of the world.

Presently, the administration, faculty, and staff at Midwestern College of Medicine (MWCOM)[1] are integrating a PBL approach into their program alongside the more "traditional" model for medical education, which primarily involves mass lecture instruction. This particular organizational site provides a fertile field for examining the diffusion of an innovation which has been viewed by many within medical education as a radical endeavor. Indeed, the tensions which occur between those who support PBL curricula and those who oppose it, indicate a struggle for ideological control within this situated medical education culture--a struggle which manifests itself in both the subtle and overt communication practices of the members of the various organizational members.

Larkey and Morrill (1995) argue that understanding how organizational cultures are symbolically co-constructed during times of organizational change is especially important as we approach the end of the millennium, for organizations are experiencing radical changes in their structures and strategies due to lightning-quick takeovers, acquisitions, downsizings, and reorganizations. This tumultuous view of organizational cultures in late twentieth century America is not inconsistent with what Gergen (1991) terms "social saturation." But, whatever we call it, its presence is felt. No longer does the traditional scholarly wisdom for studying communication

1. MWCOM is a pseudonym.

within organizations seem adequate, sidestepping as it does the messy and complicated, but potentially rich, understanding of meaning construction within contemporary organizational settings–particularly during times of significant organizational change.

Indeed, over the past two decades, there has been an increasing number of scholars (e.g., Barker, 1993; Barker & Cheney, 1994; Burrell, Buzzanell, & McMillan, 1992; Goodall, 1988, 1991; Mumby, 1993; Papa, Auwal, & Singhal, 1997) who, rather than focusing on rationality, certainty, and linearity, have begun to investigate how organizational members constantly create and recreate emergent organizational cultures. Unlike research within mechanistic and psychological frameworks, which typically examine only three or four organizational variables in a study, cultural approaches yield dense theories that have the capacity to provide more in-depth accounts of how organizational "realities" are sustained. Additionally, rather than attempting to control their subjective impressions of organizational communication, researchers who adopt the cultural perspective acknowledge their own subjectivity and the limitations and benefits that it entails.

Further, although there has been a substantial amount of research conducted on the implementation of problem-based curricula in medical and other professional schools (e.g., Kaufman, 1985; Kaufman, Mennin, & Waterman, 1989; Moore-West & O'Donnell, 1985; Moore Block, Briggs, & Mitchell, 1994), there has been little attention given to the powerful symbolic issues which are an integral part of such innovation diffusion processes. There is no denying the importance of looking at radical cultural change from this perspective, for as Bolman and Deal (1991) assert, when people are faced with "uncertainty and ambiguity, human beings create symbols to resolve confusion, increase predictability, and provide direction" (p. 244). Thus, we assert that a symbolic understanding of the communication processes which occur within a culture during the introduction and implementation of a program such as the PBL track at MWCOM can prove invaluable to other educational organizations which are faced with similar concerns.

This project–which will attempt to identify and illustrate the processes by which members of MWCOM make sense of the pedagogical innovation taking place–potentially represents a new and fruitful direction for the study of organizational change in general, and innovation diffusion in particular. It is our primary purpose in this paper to provide a descriptive/thematic analysis that lays the foundation for future work which directs attention to the complex and shifting power relationships embedded within the MWCOM culture during the implementation period of this particular innovation diffusion process.

## Method

As we have argued, we embrace the epistemological viewpoint of scholars who delve deeply into specific contexts in order to achieve rich understandings of particular cultures. Indeed, the particular questions for which we seek understanding in this study are best addressed using ethnography. According to Philipsen (1989), ethnography should fit prominently within communication

research agendas because there are so many particular communication questions which cannot be effectively addressed by using neopositivistic approaches which work from models to formulate testable relationships among variables. Philipsen explains that the ethnographic approach gives priority to a communication research model which "makes a descriptive model the test and rationale of scientific progress" (p. 261). In its most general sense, ethnography is an approach to understanding which involves the holistic study of groups and people as they go about the business of living their lives within a particular culture. Spradley (1979) provides an excellent broad definition of the ethnographic project:

> Ethnography is a culture-studying culture. It consists of a body of knowledge that includes research techniques, ethnographic theory, and hundreds of cultural descriptions. It seeks to build a systematic understanding of all human cultures from the perspective of those who have learned them. (pp. 10-11)

In the following, we present a brief overview of our specific methods of data collection and data analysis. Information regarding the research site and the research population is contained in the appendix.

## Data

### Data Collection

#### Interviews.

We collected the main body of data from in-depth, semi-structured interviews and focus groups with eighteen key administrative and faculty members who--despite various levels of knowledge of the pedagogy which undergirds PBL--have been heavily involved in, and affected by the curricular change at MWCOM. The interviews were loosely structured and the questions only served as guides intended to elicit participants' responses about the way the PBL was being implemented into the MWCOM organization. Permission to record the interview was attained from every participant except two, and permission to use all data gathered from the interview was obtained by all participants. After the interview process, we transcribed the 30 hours of audiotaped data.

Supplemental Data. One of the ways in which we drew supplemental data about the MWCOM culture, particularly as it related to the issue of the PBL curriculum, was from the observation of organizational meetings. We were granted permission by high-ranking administrators to attend two organizational meetings in which the evolving "strategic plans" of MWCOM were revealed to organizational members. We attended one of these meetings in October of 1996 and one in April of 1997.

Additionally, in order to gain a richer understanding of the pedagogical practices of both the traditional track and PBL track, we obtained permission to attend five class sessions involving the PBL track and four class sessions involving the traditional track.

Finally, we were granted access to the publications which are produced at MWCOM. These include a newsletter (published six times per year) for the staff and students at MWCOM, as well as a magazine (published three times per year) for members of the college and for members of the state medical community. Additionally, we reviewed all faculty directories, student handbooks, catalogs, and recruiting pamphlets used by MWCOM. We have reviewed the documents above (particularly the student handbooks, catalogs, and faculty directories) and utilized them for the purposes of this project chiefly as a means to verify and clarify participants' comments, and to obtain demographic information.

Data Analysis

Our primary research concern was to elucidate the symbolic processes which enable members of MWCOM to make sense of the pedagogical innovation being implemented at MWCOM. This research question was deliberately broad and thus allowed for a wide variety of analytical possibilties. However, as the interviews progressed, we noticed a dramatic emergence of the use of metaphor in organizational members' narratives. Hence, we decided that a metaphoric analysis would make an appropriate and rich analytic framework for realizing our primary research goal.

Metaphoric analysis provided a useful means for us to organize our data so that we could articulate it in an understandable way and yet still extract some of the complexities inherent in the type of study upon which we had embarked. In the following, we will briefly discuss the specific way that our metaphoric analysis has emerged as a method to elicit participant responses and to thematize data.

Following an example set by Smith and Eisenberg (1987), we uncovered and analyzed those metaphors which the organizational members themselves identified. Although one of the questions in the interview schedule asked the participants to "come up with a metaphor describing MWCOM particularly with regard to the way it has been since the implementation of PBL. . . ," such a question was used originally only as only a device to elicit expansive responses from the participants (see Jones, 1996, p. 36).

As we reviewed the transcripts, we noticed that the primary metaphor of "family" was emerging from the data. Proceeding from this overaching metaphor were two strong subthemes--the "double bind" and "entropy." We categorized these groupings as subthemes because they are both consistent with the family communication literature and the family psychology literature respectively. In the following sections we will demonstrate how the primary theme and the two subthemes elucidate important ways that members at MWCOM used metaphor to symbolize their views of the organizational culture in light of the innovation which has taken place.

## In the Beginning. . .

The concept of starting a PBL curriculum at MWCOM was not new. Indeed, the notion of PBL intrigued many of the college's faculty and administrators, who had been investigating the possibility of bringing a PBL program to MWCOM for over a decade. However, early efforts to institute a PBL program faltered because the faculty and administration were divided about the "pedagogical soundness" of the proposition as well as concerned about the additional resources that such a program would absorb. Moreover, because the previous dean would not institute such a program without complete "buy-in," the idea for a PBL track had been repeatedly tabled.

The hesitancy with which the PBL issue was pursued at MWCOM throughout the 1980s and early 1990s was a story which we heard repeatedly during interviews with organizational members. That story provided strong clues about a culture which contrasted drastically with the present organizational culture at MWCOM. According to upper- and mid-level administrators, members of basic science and clinical faculty, and support staff members, many of the cultural differences were inextricably tied to the respective leadership styles of the "old dean," Dr. Beasley[1] and of the "new dean," Dr. West.

In particular, the majority of these organizational members recalled Dr. Beasley's easy-going, acquiescent leadership style, which, though it contributed to a peaceful, friendly work environment in which most members were "long-time" employees, was also a frequent source of frustration for those individuals at MWCOM who were interested in making sure that MWCOM stayed "on the medical education forefront."

Dr. Beasley's manner contrasted sharply with the leadership style of Dr. West, who arrived during the early 1990s. Member accounts depict Dr. West as an innovative, well-spoken, positive, and action-oriented leader who, from the outset of her tenure, presented herself as fiercely devoted to educational excellence for medical students.

Dr. West's orientation toward action and openness to change were clearly evidenced during her first address to the members of MWCOM which she made shortly after her arrival on campus. In this address, Dr. West announced her initiative for educational reform at MWCOM--the development of an alternate educational program. Even through Dr. West did not specify the type of alternate educational program which was to be instituted, she issued a clear mandate that a new pilot program would be operational by the following fall.

Upper- and mid-level administrators, clinical and basic science faculty members, and support staff members with whom we

[1] Pseudonyms will be used to describe organizational members.

spoke, recollected the "shock waves" that the dean's announcement caused throughout the college, as well as the polarizing effects of the announcement on organizational members.

Unlike her predecessor, Dr. West did not seek unanimous approval for the project from the organizational members. And, as Forest, an upper-level administrator and basic science faculty member recalled, Dr. West lost no time in advancing her initiative. As Forest remarked, Dr. West "picked three people and said, 'Start planning.'" Ultimately, the curriculum advisory committee recommended PBL as a pilot program which would initially operate for seven years--the length of time needed for medical students to complete their training.

During the interview process, we heard many accounts of this watershed event, and each account was told from a different perspective. For example, some upper- and mid-level administrators worried about the logistics of developing a new curriculum in such a short amount of time, as well as the difficulty in locating the necessary financial resources which would be required to support the program. Additionally, while some faculty members were skeptical about "using students as guinea pigs" in a program which was relatively unfamiliar, other faculty members were overjoyed at the prospect of "getting to try a new way of teaching."

Indeed, although the various organizational members' perspectives regarding this early event diverged, all members emphasized that the arrival of Dr. West was inextricably linked to the arrival of the PBL curriculum at MWCOM. As we will detail in the following sections, this event was particularly important, not only because it signaled a radical difference in the way teaching would occur at MWCOM, but also because of the authoritarian manner through which Dr. West communicated her mandate. From the day that Dr. West introduced herself to the members of MWCOM and made known her aggressive educational initiative, upper-level and mid-level administrators, basic science and clinical faculty members, and support staff members knew that they were standing on the cusp of a entirely different organizational culture--one which they expressed largely in metaphoric terms, and which we also framed in metaphoric terms.

## Organizational Metaphors: A Background

> Organizations are complex and paradoxical phenomena that can be understood in many different ways. Many of our taken-for-granted ideas about organizations are metaphorical, even though we may not recognize them as such.
>
> Morgan, 1986

### The Metaphor

Just as the understanding of human communication has changed and expanded throughout the centuries, so has our understanding of one of the most powerful communication tools--the metaphor. A number of scholars (e.g., Foss, Foss, & Trapp, 1991; Koch & Deetz, 1981; Lakoff & Johnson, 1980, 1987; Yanow, 1996) note that, beginning with the ancients, metaphor

traditionally has been viewed as linguistic ornamentation. More recent developments treat metaphor as a way of seeing and/or learning, and as such, as an elemental part of language and thought, rather than simply a rhetorical decoration which can be eliminated from language.

Further, scholars have increasingly begun to investigate how metaphor is used to build and sustain organizational culture. Morgan (1986), following his investigation of the dominance of mechanical and biological metaphors, suggests that we can usefully think of organizations in alternate ways such as brains, cultures, political systems, and psychic prisons. Gergen (1992) encourages us to think of organizations as clouds and songs. Tsoukas (1993) identifies organizations with soap bubbles.

Metaphors have been used to characterize not just organizations as a whole, but also fields of organizational practice, including strategic planning (e.g., Morgan, 1993), structure (e.g., Peters, 1992; Morgan, 1993), organizational development (e.g., Akin & Schultheiss, 1990), information technology (e.g., Kendall & Kendall, 1993), organizational culture (e.g., Brink, 1993; Smith & Eisenberg, 1987), organizational change (e.g., Lundberg, 1990; Marshak, 1993; Morgan, 1993), policy (e.g., Doubuzinskis, 1992), human resource development (e.g., Marx & Hamilton, 1991), leadership (e.g., Bensimon, 1989), entrepreneurship (e.g., Stewart, 1990), problem-solving (e.g., Boland & Greenberg, 1988; Proctor, 1989), and production systems (e.g., Garud & Kotha, 1994).

However, with few exceptions (e.g.,Broussine & Vince, 1996; Smith & Eisenberg, 1987), most metaphorically- based analyses involving organizations emphasize how particular metaphors can be applied to organizational situations. However, we found the well known work of Smith and Eisenberg (1987), to be most useful instructive for our project. Rather than applying metaphor to particular organization situations, Smith and Eisenberg used participants' narratives to identify underlying metaphors which informed the world views of the employees at Disneyland over a period of thirty years. Much like the "cast members" at Disneyland (as well as the countless members of other organizations), the members at MWCOM were struggling with a colossal organizational change within which they must negotiate competing definitions of reality, as well as struggle over differing assumptions of "the way work life should be."

Throughout the interviews, individuals at MWCOM used metaphor to reveal how their own systems of values and beliefs resonate with and/or challenge organizational values and beliefs--particularly with regard to the diffusion of the PBL program. Indeed, organizational members' metaphoric constructions of their organizational experience reflected their--often latent--world views.

## Metaphoric Responses to Organizational Change at MWCOM

Organizational members at MWCOM used metaphors of "family" to symbolically conceptualize a large array of complex organizational concerns, from the way they perceived their organizational culture before the PBL program to issues evolving out of

the conflicts between the PBL curricula and its more traditional counterpart. Out of the evolving "family" metaphor we interpreted two subthemes which are consistent with the work of Bateson, Jackson, Haley, and Weakland (1956), as well as the work of Watzlawick, Beavin and Jackson (1967). The emerging subthemes support our claim that organizational members' view MWCOM as a "family." Specifically, the first subtheme reflects how the MWCOM "family members" are caught up in a classic double-bind situation, while the second subtheme describes a "chaotic family system." Ultimately, the overriding metaphor of "family" taken with the supporting subthemes, describe what organizational members perceived to be "one of the biggest shake-ups" in the history of the MWCOM--the diffusion and implementation of the PBL program into their culture.

## Metaphors of Family

During the process of data analysis, many of the organizational members' narratives formed the pervasive root metaphor of family. As our analysis demonstrates, the metaphor of "family" is murky, and it suggests a multitude of contrasting images. Indeed, Galvin and Brommel (1991) note that although family life is a universal experience which powerfully shapes our lives, no two people share the exact same experience. However, as a number of scholars (e.g., Laing, 1972; Fitzpatrick & Badzinski, 1985; Kramer, 1980) argue, one thing is certain--families are often complex political cultures within which members have interconnected, mutually influencing relationships. Indeed, families constitute groups within which members openly and covertly share and contest values, and within which allegiances are often formed and broken.

In the case of MWCOM, members expressed their organizational experiences with the PBL program in terms metaphors suggesting family issues such as "family ties untied," "sibling rivalry," or "protective parents." However, embedded in members' use of such family metaphors were expressions of how these organizational members viewed their own ability to exercise power, how they perceived others' enactment of power, and the consequences that such enactments had for their collaboratively co-constructed organizational culture.

### Family Ties Untied

One form of the family metaphor which recurred repeatedly as we spoke with members of the support staff and mid-level administrative leaders was the image of a once tightly-knit family which had been divided by the advent of organizational change. This particular group of metaphors provided strong clues as to how mid-level administrators and the support staff at MWCOM responded to what they perceived as radical changes in the cultural norms, values, and beliefs.

According to one support staff member, Lisa, the absence of social activities was a clear signal of the sharp shift in organizational culture. According to Lisa, the lack of activities stemmed from two separate, but intricately intertwined problems, both

of which were linked to the arrival of the dean and the innovation of PBL. The first problem stemmed from the dean's style of leadership; the second involved the heavy workload which was imposed upon the faculty and staff when the innovation reached the implementation stage. Although Lisa apologized repeatedly because her complaints sounded "petty," it was obvious that the lack of socializing made a large impact on how she viewed the value of her worklife. Indeed, Lisa was addressing a profound organizational value which had been submerged since the arrival of the dean and the subsequent implementation of PBL. As Lisa observed:

> We never have social activities anymore. I know it sounds picky and insignificant, but what's the harm of letting folks socialize? Dr. West needs to let people know they're appreciated. We' [used to have] pizza lunches, pot-lucks, ice-cream socials, Thanksgiving dinners, and one time we even had a lobster roast! [These were times when] we could socialize and just be a family. We felt like a family, we felt connected.

Alice, a mid-level administrator who had worked at MWCOM for many years, recounted two stories which provided rich examples of the abrupt and marked shift in the cultural values at MWCOM. First, she recalled a story about the support staff's resistance to what she perceived to be "a half-hearted attempt to rebuild some bonds," which were "too little" and "too late":

> We always used to have a picnic every summer. . . where everything was provided. . . sort of 'come celebrate the summer with us'. . . .[A]nd Dr. Beasley would. . . flip the hamburgers and hotdogs and was very much putting himself in an 'I'm one of you guys' type of thing. The first year that Dr. West was here, the summer went by and--hmmm. No mention of a picnic. Well, someone must have said something because we got a memo in the fall saying, 'We're going to have a picnic, what are you willing to bring? What hours are you willing to cook?' (big, incredulous, ironic laugh). And, only twelve people even signed up so they canceled the picnic. I mean that's a classic, classic example of the difference in the place.

In Alice's expressed view, the dean's overt attempts to "enhance the collegial college culture" were an athema to her aggressive leadership style. Indeed, Alice remembered vividly one of the first clues that she had regarding the manner in which Dr. West had reportedly handled criticism:

> a message which came down via the vertical structure--and this was a quote. 'If anything was heard about people saying negative things about the PBL or the college out in the community, heads would roll.' And I said, 'you know? What about the first amendment?'. . . I think what we have here is a case of the emperor's new clothes, y'know, 'we don't want to hear anything negative.'

As is apparent from Alice's account of "the message coming down from the vertical structure," members who were on the receiving end of such a structure began to construct Dr. West's personality as formidable. That construction, in turn, was

consequential for the emergent redefinition of the MWCOM culture. Indeed, Alice's constructed images of a kindly dad flipping burgers versus a powerful and malevolent matriarch told us much about how she viewed the vast difference in the "MWCOM family" since the arrival of the dean, and the subsequent implementation of the PBL program.

To Lisa, Alice, and other organizational members, one reason that the "family" was dividing came from communicative events which suggested that the upper administration cared little for maintaining the old cultural value system within which cohesion played a central role. However, organizational members also cited the heavy work demands of the PBL program as a major contributing factor to the lost sense of "family." Prime examples of the increased work load wrought by the PBL program include the labor required to operate the simulated patient laboratory and the gross anatomy laboratory for both curricula. Although there was no increase in the number of students, there were now two curricula using the same facilities at different times, which effectively increased the time and supplies needed to prepare the facilities for each group of students. Despite this, only one person continued to run each laboratory.

The operation of the laboratories was not the only place in which implementation of the PBL program was causing a strain in human resources. The clerical staff were also expected to perform "double duty" for the PBL curriculum as well as for the traditional curriculum. For example, Lisa, a member of the clerical support staff, asserted that the heavy workload was a major contributor to the lack of cohesion among clerical workers:

> (It used to be) one for all and all for one, a real tight family. Whereas now it's sort of turned into a dog-eat-dog place. . . that you have to be the one on top to get the attention. It's this department against that department--the atmosphere just isn't the same. Even in our own department, there's 'this end of the hall and that end of the hall, and that end of the hall in particular will do stuff without us, even though we're supposed to be one department. Maybe it's because we're all overworked. Maybe we don't want to get together anymore because when we leave here we're so tense we don't want to be reminded of the place.

Two Kids in the Family

Many scholars (e.g., Carter & McGoldrick, 1988; Duvall, 1988; Glick, 1989; Hill, 1986; Hohn, 1987) examine the developmental changes in family life as the courting relationship moves to marriage, and eventually to child-rearing. Often chief among the issues confronting the developing family are resource concerns. Such concerns are often magnified in families with two or more children. As Satir (1972) notes, "Each time a new person is added, the limited time and other resources of the family have to be divided into smaller portions but the mother and the father still have only two arms and two ears" (p. 217).

As we spoke with the organizational members at MWCOM, it became clear that the "birth of the second child" which had been conceived by the curriculum advisory committee was a tremendous drain on the MWCOM family. This was no wonder, considering that the number of students in PBL curriculum was only one-fifth of the size of the student body enrolled in the traditional program, but used one-half of the curricular resources. Indeed, the following accounts indicate that members of the upper- and mid-level administration, support staff, and traditional students viewed the PBL program as extremely "human resource intensive."

Given his mid-level administrator's role, Grant was in a position where he could compare the human resource requirements of both curricula. His account of this unequal resource distribution was cast in terms of exactly the types of issues that confront a growing family:

> I would say that before [the implementation of the PBL curriculum] we were sort of like a happily married couple with no children, and that after the conception of the program, it was sort of like having twins, and it was not just a new addition to the family, we had doubled the work, maybe tripled the work, and one would be pulling one way, and one would be pulling the other way, and people who weren't fighting before, say the parents who weren't fighting before, found themselves so stressed out that they were fighting and being resentful of the time they were spending. . . . There is this general belief that you can take up the slack, you know, it is sort of like, "well if you have two kinds, five more shouldn't cause you any problems." And the answer to that is absolutely wrong.

Power relationships within families are often defined by the allotment of resources which serve as powerful symbolic reminders of "who counts and who doesn't." Organizational members clearly were concerned with the allocation of resources to the PBL program. In particular, some administrators argued that the PBL program was usurping a disproportionate share of the organization's financial resources--thereby depriving the traditional program of the resources that it needed to remain viable--while other administrators maintained that such allocation was necessary if the PBL program was to succeed. The negotiation over resources resulted in considerable organizational tension, particularly for those administrators who embraced the pedagogical principles of the PBL, yet who were also responsible for keeping the traditional curriculum operational. Interestingly, administrators discussing this complex issue sustained the family metaphor to explain their position.

Upper- and mid-level administrators alike, discussed the difficulty of the resource issue in terms of families with two children where one child (the PBL program) was exceptionally bright, and the other child (the traditional program) was "just a regular kid." Larry, an upper-level administrator and clinical faculty member, expressed his sympathy for the assistant dean, who was in charge of both curricula. As Larry explained, the assistant dean was like a parent who was forced into a position of looking out for the best

interests of both children but who must be particularly vigilant that the exceptional child did not receive advantages while "knowing full well that one child is stellar and one child is not."

Mid-level administrator Erin, who likened her role to "a mother with two kids," felt "schizophrenic" because she was trying to protect those who were studying in a program whose pedagogy represented something she no longer supported. Erin admitted that, although she tried to present a "two-sided" picture about each of the programs, she felt that her efforts were largely unsuccessful.

Kathleen, another mid-level administrator who had close contact with both the traditional students and the PBL students, described her perception of the inequities between each of the respective programs by using the metaphor of a mixed marriage in which a mother who already has a child remarries, and, together with her new husband, has another child. As Kathleen remarked, "Despite the best intentions of the new father to treat both of the children equally, one child is always 'odd kid out.'"

Likewise, despite the stated efforts of mid-level administrators such as Erin, comments during the interviews reflected a deep frustration on the part of upper- and mid-level administrators as well as faculty members that they were unable to diminish the inequalities which were emerging between the two curricula. Indeed, these disparities recurrently cast the traditional students as somewhat neglected children who were forced to watch their "golden" counterparts flourish.

Another perspective of the "two children" metaphor was added by Forest, an upper-level administrator/faculty member who conceptualized the two curricula as "two children." He acknowledged that the PBL program did absorb an disproportionate amount of curricular resources. However, in Forest's view, the gifted child who needed extra resources to realize his/her potential was begrudged such resources "for all the wrong reasons." In response to the philosophy that "if the [traditional students] can't do it then the [PBL students] shouldn't be able to do it," Forest replied:

> My God! That's why you have a pilot curriculum--to do different things in different ways! [Those who complain] don't grasp the pedagogical philosophy, nor the fact that if you're going to have a pilot project, it's not going to be the same! You can't do everything the same with the new kid as you have done with the kid you've had for twenty years.

Throughout the interviews there was little doubt that about the fact that many faculty and mid-administration members believed deeply that the pedagogy which undergirded the PBL program was far superior to that of the traditional curriculum. Yet such a stance had to be reconciled with the realization that "the golden child" received a disproportionate allocation of resources. Such paradoxical positions radically affected the way that these members perceived the organizational culture since the introduction of the PBL.

All of the organizational members at MWCOM with whom we spoke agreed on one thing: that the implementation of the PBL program at MWCOM was an ambitious undertaking which was laden with risks and scored with hard work. However, one particular area where the viewpoints of organizational members polarized sharply involved the plans and actions for the PBL program. Many organizational members applauded the pedagogical philosophy upon which the PBL program was based; nevertheless, they asserted that such plans stood in stark contrast with the resources available to implement them. The mid-level administration and support staff in particular expressed their belief that the administration was not realistically assessing the resources needed to successfully implement the PBL program. Furthermore, some accounts indicate that the mid-level administrators and support staff members had suffered various forms of punishment from the dean and upper-level administration for voicing concerns about problems with implementing the PBL.

In the following section, we will draw from the family psychology literature, in particular the work of Bateson, Jackson, Haley, and Weakland (1956), and Watzlawick, Beavin, and Jackson (1967), to help illustrate the contrasts between organizational members' accounts of the idealistic philosophy of the PBL versus their accounts of the difficulty of making the PBL program operational at MWCOM. The work of Bateson et al. and Watzlawick et al. is useful in this endeavor for several reasons. Not only does it help illuminate the paradoxical character of the "double bind" in which many MWCOM members found themselves with regard to "the ideal versus the reality" of the PBL, it is also helpful for illustrating the "no win/no way out" feelings expressed by many of the organizational members in terms of their communication with members of the upper-level administration. Importantly however, such work–based as it is in the family psychology and communication literature–is consistent with, and lends strong support to, organizational members' overarching metaphorical view of MWCOM as a "family."

In order to paint the clearest possible picture of organizational members' struggle with "the ideal versus the reality" of the PBL implementation, we will begin with a short discussion of the "double bind" as it is articulated by Bateson et al. (1956), and expounded upon by Watzlawick et al. (1967). Additionally, in order to clearly illustrate "the double bind" within which the members of MWCOM struggled on a daily basis, we will divide the discussion into two parts: first, we will focus attention on organizational members' narrative constructions which emphasized the "ideal" of the PBL philosophy; second, we will discuss organizational members' narrative constructions which illustrated what many took to be insurmountable obstacles in actualizing the PBL program. Together, these two clusters characterize one part of the classic "double bind" in which members of the MWCOM "family" were caught.

## The Double Bind

In their explorations of family psychology, Bateson et al. (1956) first applied the notion of the "double bind" to the literature in family psychology. Later, Watzlawick et al. (1967) described the phenomenon of the double bind as:

> Two or more persons. . . involved in an intense relationship that has a high degree of physical and/or psychological survival value for one, several, or all of them. . . .In such a context, a message is given which is so structured that (a) it asserts something, (b) it asserts something about its own assertion and (c) these two assertions are mutually exclusive. . . .Finally, the recipient of the message is prevented from stepping outside the frame set by this message. (p. 212)

This work, which has been used extensively in the field of family psychology, applies well to the mid-level administrators and support staff members at MWCOM who, as part of the "MWCOM family" described how they "felt caught" in just the sort of double bind which is described above. Essentially, organizational members at MWCOM were both supported and constrained by the organizational system. Thus, they often found themselves torn between the messages (experienced and promulgated by themselves and others) which touted the benefits of the PBL, and the contradictory messages (also experienced and promulgated by themselves and others) which expressed the impossibility of operationalizing such a program. In the following section we will use organizational members' narratives to demonstrate the messages which constructed the "dream" of the PBL ideal--the first part of the classic double bind with which the MWCOM "family" wrestled.

### The Dream

As members of both the upper- and mid-level administration commented, the rate of adoption of the PBL program among the faculty members had been swift indeed. It is interesting to note that at the time we began our investigation one of our assumptions was that a key point of divergence between organizational members would be their adoption of the pedagogical philosophy undergirding the PBL program. As some of the accounts suggested, such had been the case for a brief period of time. However, it became clear though interviews with organizational members at every level--particularly through their descriptions of the positive aspects of the PBL program--that, at the time of the interviews, members of MWCOM harbored very little overt resistance to the PBL philosophy. Indeed, mid-level administrator/clinical faculty member Sydney observed that within the three-and-one- half years since the PBL initiative was announced, there had been a "massive contamination" among the faculty members. Sydney narrated the quick chronology of the change:

> So, there was not very much, if any support at the time that we started thinking about problem-based learning, but once we got started it got off like wildfire. We barely had enough people to cover the program for the first class. . . .[W]e had a lot of

> difficulty especially with the basic scientists--there was just very little buy-in. That's changed dramatically. The faculty have really bought into problem-based learning, and soon we had more faculty than we could handle. People who sort of reluctantly came and participated have become total converts over the past few years. Now there's this total buy-in throughout the college to the point where the college is looking at changing the traditional curriculum to integrate what's taken place with the PBL curriculum.

Sydney's account is just one of many that we heard detailing the rapid rise in popularity of the PBL program--particularly among the faculty members. Indeed, despite an early contentious process to get the basic science faculty to "buy in" (which we will discuss in more detail in a later section), this part of the diffusion story had already played out with a successful conclusion.

According to our observations, and the observations of many of the organizational members we interviewed, the PBL program was a pedagogical innovation which revolutionized the way that students learned and the way that medical educators at MWCOM viewed both their mission and their students. In the following, we will discuss the many ways in which organizational members expressed their support of the pedagogical ideal which the PBL represented. For instance, basic science faculty member Alex related positive remarks about the PBL students:

> I was utterly amazed by the whole thing and utterly delighted because I felt I was using my time very effectively, and they were using their time very effectively. They were prepared when they came for [classes], so in a sense, their questions drove the class through what we would cover in a traditional course. But because it was in response to their questions, I could give succinct answers without feeling I had to. . . give them everything from ground zero, because I could tell by their questions that they knew a lot already. . . . That was a real highlight for me for teaching, and that was the thing that has convinced me that this is the direction to go.

Larry recalled another incident in which the PBL students made an excellent impression on a faculty member at MWCOM who had previously been "anti PBL" but then had watched the PBL students answer questions put to them during a "challenge panel." As Larry remembered:

> [A particular faculty member] was very impressed with the amount of knowledge that they had, the amount of anatomical information that they seemed to have mastered. . . .But, what he was mostly pleased with was that after the class, several students walked to him and thanked him for his challenging questions, and he said he had never had that happen to him--that students had come up and appreciated what he had done to challenge their knowledge.

As these accounts indicate, rather than resenting students who might pose a challenge to their authority and "the way things are done around here," the faculty members with whom we spoke viewed PBL students as colleagues and appreciated the fact that these students were not "wasting [the faculty's] time"--something that had been a matter of concern during the planning stages of the diffusion process.

Knocking down the walls. Pedagogically speaking, the PBL program had made an impressive impact at MWCOM. In addition, as a number of organizational members observed, an obvious benefit which came about as a direct result of the implementation of the PBL program involved "knocking down the walls" between what had previously been two very segregated academic sub-cultures--the basic scientists (who were in charge of teaching medical students essential scientific information such as biochemistry and Microanatomy) and the clinicians (who were in charge of teaching medical students clinical medicine). Although both groups within the organization were heavily involved in student teaching, traditionally, clinicians and basic scientists had not been heavily invested in each other. Alex, a member of the basic science faculty, reflected upon the importance of integrating the various scientific disciplines which historically had remained segregated:

> All the barriers that we have put up. We say that 'over here is biochemistry and over there is Microanatomy, and over there is gross anatomy'--those are all artificial barriers that people have put up sometime along the way. The organism, the human body, acts as a unit, and therefore to explore it as a unit makes very valid sense.

It certainly did make sense. The very essence of PBL involves the study of the human body as well as the social systems which affect human health. It only made sense that such a holistic enterprise necessitated interaction between basic scientists and clinicians in charge of diffusing such a program into the MWCOM culture. However, according to many of the basic scientists, taking down the barriers between the disciplines at MWCOM was a long, arduous, politically electrifying process. As a number of faculty, mid-level administrators, and upper-level administrators reported, getting the basic scientists--particularly the gross anatomists--to invest in the holistic notion of the PBL curriculum had, during the planning stages of the diffusion process, seemed, to the PBL planning committee, "well nigh impossible." The story is interesting not only because it highlights an eventual realization that two diverse subcultures shared many similar pedagogical values, but because it was a colossal power contest which, for a short time, threatened the viability of the fledgling program. As Forest recalled:

> When they gave the presentation about the PBL, and an overview of some of its concepts, the reaction among the basic scientists was typically screaming and shouting, and, if you'll pardon the term, most of them thought it was 'a crock of shit.' Another organizational member [a clinician] recalls one particularly tense meeting when one basic scientist became so

agitated that his face flushed and he hugged himself while rocking back and forth. In the words of this clinician, "I started to feel guilty for not going over there and administering life support!"

Sydney remarks that "this war zone" continued for nearly a year. In addition to the segregation issues, other, more practical considerations were at stake. One of the more overt and blistering points of contention involved the gross anatomists' argument that a case study method of teaching would render it impossible to dissect the body in an efficacious fashion. Additionally, Forest asserted that the basic scientists felt that the method of testing within the PBL program would result in a serious compromise of academic standards.

However, according to upper-level administrators/ faculty members Larry and Forest, and mid-level administrator/faculty member Sydney, the opposition of the basic scientists to the implementation of the PBL curriculum was related to other, underlying concerns revolving around how the role, funding, scheduling, and perks of the basic science faculty were going to be affected by the implementation of the PBL curriculum. According to Larry, Sydney, Forest, and Jared, a clinical faculty member, the expressed concern among basic scientists during early meetings was the perceived time-intensive nature of facilitating a PBL course. The resistance was grounded in the basic scientist's view that the PBL program was an assault on their already over-extended schedules. This concern was directly related to a politically charged issue of allegiance, for many on the basic science faculty were under a "split contract" in which their duties were divided between the medical school and the College of Arts and Sciences which housed the Basic Science department. The fact that Dr. West and the chair of the basic science department seriously disagreed about a number of fundamental issues only made the situation more difficult.

Although it took two and a half years of innumerable meetings, "dogged persistence," and demonstrations of the PBL students "doing their thing," Forest, Sydney, and Larry noted that the developers of the PBL curriculum were able to obtain a "critical mass" of basic scientists to "buy in" to the idea of PBL. Central to this effort was the implementation of a series of task forces, each of which was jointly chaired by a basic scientist and a clinician. Although the major goal of each task force was to decide upon core learning issues for each course, an underlying goal (and, according to Forest, an equally important goal) was to get basic scientists and clinicians to work together.

Although many issues still need to be resolved, basic scientists and clinical faculty alike remarked during the interviews that the complex process of persuading the basic scientists to adopt the PBL effectively "built a bridge" between two disparate organizational subcultures and was also instrumental in "decompartmentalizing the various disciplines." In addition to envisioning the

broad applicability of their particular disciplines within the larger context of the medical education experience, basic science faculty member Alex noted that the clinicians and the basic scientists:

> have come to realize through their experiences that they share certain values and outlooks, and that they enjoyed working together. There is no doubt that the PBL curriculum has definitely served to bring clinical and basic science faculty together as individuals--not the mass effect. . . they are interacting in a more personal and more frequent and a deeper level than they ever were in the past.

Sydney returns to the "family metaphor" to describe the culture which has resulted from the implementation of the PBL program:

> In a sense we really have become a family, which we really weren't before. I think a lot of the basic scientists didn't perceive themselves to be very valued parts of the medical school. They would come and teach their courses each year, but other than that they really didn't perceive themselves to be an important part of MWCOM. Now they consider themselves to be a very important part of the medical school and they are. The clinicians, on the other hand, who used to [feel] almost like basic scientists were here as the necessary evils so the students could pass the boards, now feel that they are an equally important part of the faculty. So it's really been a nice melding and I think the PBL program is fully responsible for that.

In addition to the strong common culture had been constructed from two groups who previously had little contact with one another, the performances of the PBL students were convincing basic scientists of the pedagogical merits of the PBL curriculum. Indeed, as the accounts above have demonstrated, two years after the first class of PBL students entered the program, the majority of basic scientists understood and embraced the pedagogical philosophy of the innovation.

As Rogers (1995) notes, the rate of diffusion for some innovations takes only a few years. The rate of adoption for the PBL program within the MWCOM system had been quick, and, according to the upper- and mid-level administrators and faculty members, the PBL program had become recognized throughout MWCOM as the preferred, perhaps even ideal, form of pedagogy. However, despite such a recognition, mid-level administrators and support staff members at MWCOM with whom we spoke constructed narratives and metaphors which suggested that such an idyllic vision was impossible to achieve.

Indeed, according to these members, the mid-level administrators and support staff largely perceived that the administration's desire to ensure success of the PBL program led to a philosophy of "support the PBL program at all costs." According to the narratives of many of the organizational members, such a philosophy overrode the administration's ability to adequately address many of the organizational problems linked to the innovation. Yet, members of the mid-level administration and

support staff reported that they were the organizational members who had to support the PBL vision with the scant resources at their disposal. Such feelings contributed to the struggle they encountered as they attempted to negotiate their "double bind"--an acceptance of the pedagogical ideal of the PBL with the difficulty of operationalizing the PBL program.

The Nightmare

Like family members who are trapped in an untenable situation, the following accounts illustrate organizational members' displeasure with their troublesome situation. The issue that seemed to cause the most concern among mid-level administrators and support staff members involved their belief that the organizational resource support needed for the PBL program was insufficient. To illustrate this belief, we have divided organizational members' narratives into two primary categories: 1) how organizational members symbolically responded to the administration's "success at all costs" philosophy of innovation implementation, and 2) how organizational members voiced their apprehension over the implications that such a philosophy held for the PBL program, as well as for their organizational culture.

Late one Tuesday afternoon in April, we attended the second of five organization-wide meetings. These meetings were not mandatory, but they were conducted at various times over the space of a week to allow for the largest possible attendance. At first, the attendance and the energy level at this particular meeting was low. It was 4:30 and most of the support staff finish work at 4:00. However, people trickled into the plush meeting room, and by 4:45 organizational members of all levels were present.

The purpose of this particular meeting was to present all organizational members with a strategic plan for the development of MWCOM over the next several years. Dr. West and a large task force which was comprised of physicians, clinical faculty, basic science faculty, deans, and hospital administrators had been meeting since September of the previous year to draft the "strategic planning document" which, according to the document, was "like a living thing, always adjusting to new realities and always seeking to keep healthy as it progresses." It was now time to get input from organizational members. For, as Dr. West noted brightly as she began her presentation, "Everyone needs a voice."

The lack of reaction to Dr. West's optimistic presentation was palpable, and at one point she commented, "Remind me never to party with you folks!" Dr. West's remark seemed a bit ironic in view of the way that her leadership style was viewed by organizational members at MWCOM. Indeed, members may have been having a hard time thinking about partying with anyone who wouldn't flip burgers for them at an organizational picnic.

However, Dr. West finally received a big reaction when--referring to the implementation of PBL curriculum--she announced that "we have gone through the major uphill level of change and we are finally over the hump." At this point, those in attendance--particularly mid-level administrators--looked at one another and whispered, chuckled, and shook their heads.

One mid-level administrator raised his hand and challenged Dr. West's assumption, noting that "we thought we were just ramping up!" This comment drew scattered applause and loud laughter. One of the mid-level administrators joked sarcastically, "We can't talk. . . no one has any breath!"

The dean recovered with a curt chuckle which only partially veiled her frustration and countered her earlier assertion, noting, "Okay, you are all carrying the ball now. I guess the work is not done, but we're not laying foundation anymore--to some extent. Things are dependent on where you sit." Having thrown the ball back into the laps of the attending organizational members, the dean moved abruptly to another topic.

This particular event clearly illustrates a key issue that members of the mid-level administration and support staff at MWCOM related to me throughout the interviews. Specifically, the mid-level administrators and support staff argued that the Dean's expectation of the organization's ability to adapt to the PBL curriculum was vastly greater than the resources which were available.

Interestingly, only the mid-level administrators and support staff expressed frustrations with a perceived disparity between available resources and resource requirements for implementing the PBL curriculum at MWCOM. In one example, Paula, a mid-level administrator, noted that the task seemed impossible, and she felt as if she had no control over the success of the program:

> There is almost a desperation on everybody's part. . . and a resentment of the leadership and whoever is making the decisions because they don't know what it's like, they have no idea how hard this is to pull off. . . on the front lines. Dr. West just comes in, makes a proclamation, and we deal with it however we can. She isn't even aware, doesn't even have a sense of what we go through every week. The administration never even asks how it's going. Ya know, we're working past capacity now. It's gonna blow up in our face any day now. It's gonna blow. That's what it feels like. It feels like a steam kettle that's just gonna blow, and you're right in the middle of it, and you know it's gonna happen, and ya know you're gonna get scalded, and you know there's no way to stop it.

Paula was not the only one who used catastrophe metaphors to explain her feelings of powerlessness in the face of the inevitable reckoning between administrative dreams and fiscal realities. Bridget, another mid-level administrator, revealed that much of the PBL program was funded with "soft" (grant) money which was due to run out within the year, and although the PBL program

was a pilot program, it was nevertheless slated to continue for four more years. Bridget criticized the upper-administration's handling of the situation in the following way:

> Sometimes you sort of feel like you're riding in the car with one of your administrator/ colleagues and you notice that the gas gauge is almost on empty. So you say, 'Ya know, maybe we ought to think about pulling the car over and getting some gas.' Then they look at you and scream, 'We don't need to look at the gas gauge! Why are you so worried about the gas? We just need to drive the car! What's your problem?

Grant, a member of the mid-level administration who had been told in no uncertain terms at the beginning of the planning process that he was "to have nothing to do with [the implementation of the PBL]," expressed concern with what he viewed as the administration's unrealistic plans for the new curriculum. When we asked Grant why he had been banned from the proceedings, he noted that the administration regarded "the practical people as blockers" who "ruin the creative atmosphere" that arises when "[the administration] comes up with some brilliant idea." According to Grant (who, in view of his situation, might well have contested Dr. West's assertion that "everyone needs a voice"), the administration got upset when "the practical people let the air out of their balloon" by questioning them about practical considerations such as providing adequate staffing to operate the laboratories. The administration, in Grant's view, "solved" this problem by not allowing:

> those nitty-gritty people. . . in the trenches in on their decisions. These people could probably save [administration] a lot of money, time, and effort by being in on the decisions. The best thing in management of any adoption of diffusion is that the people who are gonna have to be the defusers need to be in on the adoptive process very early on. . . even though some of the dreamers are gonna see them as blockers.

Interestingly enough, observed Grant, "the same people will come back to you when they need something done because, as clear as it is that almost anybody can be a visionary, there are only a certain number of people who can actually make things happen."

The previous accounts reflect the other half of the dialectical tension which was occurring among the organizational members at MWCOM. In particular, the mid-level administrators and support staff members with whom we spoke were caught in a classic "double bind" situation--they understood and supported the pedagogical benefits of the PBL program, yet they were the organizational members who were called upon to stage the upper-administration's vision without the adequate technical or personnel resources required to perform the task.

Additionally, as the following accounts will demonstrate, mid-level administrators and support staff members often felt "damned if we do and damned if we don't" in terms of their perceived ability to positively change their situation. As we noted earlier,

the "no win" character of the double bind situation is well borne out in the family communication literature (e.g., McKenry & Price, 1994; Montgomery & Fewer, 1988; Noller & Fitzpatrick, 1993). And, as the following organizational members' narratives suggest, their situation could be likened to a dysfunctional family in which some members act as tyrants and other members have no voice and few means of escape.

The Emperor has new clothes. . . and a deaf ear. As frustrated as the mid-level administrators and support staff were with what they perceived to be "a vision without a foundation," and despite the dean's public assertion that all organizational members needed "a voice," these two groups of members felt that they could not openly express their frustration. Such feelings epitomize the nature of the double bind situation. One important way that this concern was enacted during the interviews was through mid-level administration and support staff members' expressed concern with absolute anonymity. Although we realize that--like its academic counterpart--the medical community is small, we were astounded by the fact that, throughout nearly all of the interviews with mid-level administrators and support staff, the participants continually sought reassurance that their identities remained a secret. It was interesting, too, that these participants lowered their voice to a whisper when speaking negatively about any member of the upper-administration, and particularly when they were speaking about Dr. West. The fact that members of this particular group should lower their voices when speaking to us of the upper-level administration and the dean, provided powerful symbolic clues that the organizational members within this group felt "voiceless" in terms of expressing their true concerns to the administration.

In addition, it was also very clear from listening to the narratives of mid-level administrators and support staff that they felt any voices protesting the day-to-day struggle of accomplishing the PBL curriculum were effectively muted by the upper-level administration, and particularly by Dr. West. Indeed, as we point out in the following section, organizational members expressed such sentiments by using metaphors of powerful and often malevolent royalty whose "deaf ears" served only to perpetuate their "double bind" predicament.

The continued construction of Dr. West's autocratic style of leadership was borne out throughout a number of interviews in which organizational members relied on other metaphors of malevolent and/or all-powerful royalty to tell me about their perceptions of Dr. West's management style as well as her dislike of being given negative information.

For example, support staff member Jillian referred to two members of MWCOM who had voiced criticism to the dean. According to Jillian, such critique did not bode well for either member. Indeed, Jillian noted that, upon "her majesty's decree," one--a support staff member--had "been shipped out of the college," and one--a member of mid-level administration--had "put his keys on his

desk and walked away for good." In Jillian's words, "it doesn't take too many things like that make you think you're disposable. Absolutely disposable when it comes to reaching Dr. West's goals."

Bridget related stories about how Dr. West "was in denial" about problems with the PBL program. According to Bridget, Dr. West pretended not to have received e-mails in which various members of the organization expressed concerns about the curriculum. As Bridget noted, "Dr. West is so into kingdom-building that there's no time to focus on substantive problems." Additionally, Erin revealed that:

> [I]f you dare say--try to make a change in one of the dean's edicts, or something [one of the assistant deans] has done, if they've gone in the wrong direction or been counterproductive to the program, it's "off with your head!"

In addition to their fear of the dean's reprisals, mid-level administrators expressed that they were stifled in their attempts to communicate problems which they experienced with the new curriculum to the upper-administration because the upper-administration, in it's zeal to make the PBL program work, often turned a deaf ear to their complaints.

Mid-level administrator Grant, who commented on the staff shortage since the introduction of the PBL program, recalled a particular instance when he appealed to an assistant dean to make compensatory time available to overworked staff members. According to Grant:

> There is no talk. I have several contract employees in my unit, and all of them forfeited vacation days. They felt like they had no choice. And [an upper level administrator], when I point this out, says, 'Well, what is this supposed to tell me?' And I'm saying that it tells you that these people are overworked. And he says, 'I really don't see what this has to do with me.' This is as far as I get. Trying to make [administration] realize that we need more people is like talking to a brick wall.

Judging from the comments made by mid-level administration and support staff members regarding the deaf ears of the upper administration--in particular the dean--one decree which has been communicated loudly and clearly is that "organizational members shall not complain to administration." Lisa summed it up well in her commentary on the organization-wide strategic planning meetings in which Dr. West called for more "MWCOM community participation." As Lisa expressed it, "why bother? They won't really listen for input. They'll do what they want anyway!" These are ironic words in view of Dr. West's very public comment that "Everyone needs a voice."

In the previous sections we have demonstrated that--like less powerful members of many dysfunctional families--the mid-level administrators and support staff at MWCOM were engaged in a classic double bind situation. On the one hand, they strongly supported the pedagogy of the PBL. Yet, on the other hand, in implementing the program they were forced to deal with what

they perceived to be insurmountable obstacles. Additionally, these organizational members were also forced into the "double bind" of knowing what was necessary to make the PBL program operational, yet being forced to silence that knowledge. Indeed, these organizational members were involved most heavily in the pragmatic considerations of PBL implementation, yet they lacked both the resources and the voice to acquire desperately needed support for their efforts. For the mid-level administrators and support staff members who were "caught in the middle," the pedagogical dream turned into a logistical nightmare.

"Chaos" and "entropy" are often used as figurative descriptors of the degree of disorder or uncertainty in physical and human systems. Scholars who study both the family (e.g., McKenry & Price, 1994; Montgomery & Fewer, 1988; Noller & Fitzpatrick, 1993), and organizations (e.g., Heifetz, 1993; Jordan, 1996; Maxcy, 1995; Merry, 1995; Stacey, 1992; Watson, 1994) have used the notion of chaos and entropy to describe the possible state of disintegration--particularly during periods of change. In the case of MWCOM, organizational members' descriptions of "chaos" during the implementation of the PBL at MWCOM forms a second subtheme which, like the notion of "double bind" supports organizational members' view that MWCOM is a "family." Specifically, organizational members at MWCOM spoke of "chaos" to articulate two particular issues which strongly affected the MWCOM culture during the time of the PBL implementation. The first issue involves what upper and mid-level administrators and faculty members took to be "chaos by design"-- deliberate attempts on the part of the upper-level administration to close borders, thereby keeping other organizational members "in the dark" in order to establish the PBL program with the least amount of resistance. The second issue explores the expressed beliefs of organizational members who perceived that chaos was caused because members of the upper- administration remained unresponsive to the need for practical support for the PBL program.

Subtheme Two: Systemic Chaos

As we have mentioned previously, a wide number of scholars (e.g., Boss, 1988; Hall & Fagan, 1968; McCubbin & Patterson, 1985) who study the family, rely on systems theory to help explain the nature of family change. It is well documented that in the face of change, members of families and organizations alike often perceive a chaotic environment. Indeed, as will be evidenced in the following, the "MWCOM family's" perception of organizational "chaos" was particularly strong during the implementation of the PBL. The following accounts will also demonstrate that many organizational members' perceptions of "tyrannical leadership" and the "downfall" of MWCOM were scholars' observations of social system deterioration.

Organized Anarchy. "When the new dean came in and announced the program, it was like [the dean] took a thousand piece puzzle and threw it up in the air. It just disassembled everything." Jillian's observation reflects one of the primary themes that

emerged from organizational members' description of MWCOM in light of the implementation of the PBL. As mid-level administrator Bridget observes:

> Since the dean announced the PBL program it just seems like you never know when you come in every day what is going to be different and totally off-the-wall. It's pretty amazing actually. I've never experienced anything like it.

In the following section, we will discuss how upper and mid-level administration, faculty members, and support staff members expressed their understanding that MWCOM had been in "a chronic state of upheaval" since the pivotal day when Dr. West arrived and announced that a new program was to be instituted--and that such a chaotic state was an intentional design by the dean to lessen resistance to the PBL curriculum by "keeping [organizational members] reeling."

Bridget was one of the mid-level administrators at MWCOM who expressed a belief that "there is a method to the dean's madness" and that the organizational chaos was purposely designed to lessen resistance to the implementation of the new curriculum by "making sure that organizational members remained off balance" and by "keeping people in the dark" about the particulars of the implementation of the PBL during the nine month period of time between when the initiative was announced and the time the first class of PBL students entered MWCOM.

Both upper- and mid-level administrators pointed out the close alliance between the three members of the planning committee during the planning stages of the PBL was one principal reason that "no one really had a clue as to what was going on." If anyone did "have a clue" the three members of the planning committee did. Indeed, these three members were routinely referred to by themselves and by other organizational members as (among other things) "the triumvirate," "the Trinity," "the three stooges," and "the three musketeers." When asked if she thought the implementation of the PBL had gone smoothly, Erin addressed exactly this issue in her reply:

> It was. . . a coup. It was not a smooth implementation. It was a coup. A coup. It was a heroic action. It wasn't a process where buy-in was sought and people were brought along in the planning stages and were made to feel a part of the process. . . .It was three or four cowboys holed up and making their secret little plans, and then riding and roping until they got things conquered, making it happen. But, I think there could have been a lot of things done along the way to kinda bring people along. They did a lot of riding and roping and shootin' 'em up and I'm not sure it was necessary. I mean there are times you can come in and shoot 'em up and ride roughshod over folks, but I don't think it needs to be your major tool!

Indeed, even the members of the "triumvirate" acknowledged that their planning was done quietly and quickly with little "buy in" from other members of the organization. Moreover, as one member of the "triumvirate" admitted, the dean intentionally created

confusion in the organization in order "to throw people off-balance enough that they were ready for change or they were less ready to fight change." As another member of the "triumvirate" noted:

> Dr. West knew that as a leader there was a window of opportunity here, and that if she waited and then said 'We're going to have a new curriculum' it would not have had the same impact at all. Dr. West came in and things were being shuffled around and people were jockeying for positions and all of the sudden, Pow! A new curriculum was started. So that one kind of steam-rolled right through; but I think Dr. West knew that there was a certain amount of time to get a certain amount of changes made, and if they weren't done right then, then getting the PBL program to fly was going to be twice as hard.

Additionally, faculty members and mid-level administrators suggested that the dean intentionally "muddied the waters" among the basic scientists in what they viewed to be a political effort designed to get them to loosen their attachments to the College of Arts and Science and to align themselves more closely with MWCOM in general, and to the PBL program in particular.

As we outlined earlier, historically, the dual allegiance had been a difficult one. However, as Forest related, the situation became untenable with the addition of the PBL program because of the extra time demands being placed upon members of the basic science faculty who were already struggling to keep up with the research and teaching requirements wrought by their own department.

Additionally, as mid-level administrators and basic science faculty members contended, the dual allegiance caused by the basic scientists' contract to MWCOM was the primary cause for the poor relationship between the chairperson of the Basic Science department and the dean of MWCOM. According to mid-level administrator Forest, the situation between the two degenerated to the point where the dean appointed her own "Director of Basic Science" who was affiliated solely with MWCOM. As one faculty member, Cory, observed, this director was not recognized by the College of Arts and Sciences, and "this appointment has created a lot of stress, tension, and uncertainty with the basic scientists in terms of their alignment. I mean, who do they align with?"

According to Cory, Sydney, and Erin, the dean created "fuzzy lines" intentionally to keep the director of basic science's position ambiguous so that the basic sciences would be unsure of accountability. Bridget noted that, although the president of the university had intervened, and the dean and the basic science chair had been charged with solving the problem, there continued to remain:

> [T]his high, high, level of stress and uncertainty that the basic science folks are feeling–some of them are not speaking to each other at this point because of the rift. We have several basic scientists who are very active with the PBL program, but are non-tenured faculty. They are really stressed out because they know that their promotion and tenure lies in the College

of Arts and Sciences, but their belief in the PBL program is so strong. They're confused because they know their alliance with MWCOM is going to nail them when it comes time for tenure.

Impermeable Boundaries. In their description of the relative "openness" and "closure" of the family system, Montgomery and Fewer (1988) note that the "relatively open" system depends on its members' acquisition of information and the effectiveness of the process by which the meaning of the information is negotiated (p. 118). In the accounts which follow, we will detail how mid-level administrators and support staff members at MWCOM perceive an organizational culture which was rendered chaotic because of relatively impermeable boundaries set up by members of the upper-level administration who were not providing the much needed direction and pragmatic support for the PBL program. Support staff member Lisa remembered the first frantic year of the program:

> We pulled the PBL program off by the seat of our pants. . . .When those students walked through the door on the first day, I don't think anybody had a clear vision of what was going to happen that year, and we definitely were not prepared for them.

Indeed, a number of mid-level administrators recalled that from the outset, the PBL program was plagued with a lack of "real direction from the top." For example, Paula commented that a major factor in such lack of direction was that messages coming from various members of the administration--even though they were intended to provide direction for the implementation of the PBL program--rarely corresponded with each other. Paula remarked:

> The administration [doesn't] know what they want or how to implement it. The right hand is telling you one thing and the left hand is telling you something else. It's a lot like playing telephone, where you say a number back and forth and it gets lost in the translation. Rather than the administrators getting together and them saying, 'look, we need to express our needs for the curriculum in this kind of way,' we get a different set of instructions from each of them.

Grant explained his frustration at the lack of administrative direction in the following terms:

> I can say to you, I want you to draw a picture of a person, and you can spend three hours on it, and I would look up and say, 'No that is not what I had in mind at all--draw another picture of a person more like what I had in mind.' But still no definite detail. Then you come back and they say, 'but this is a male! I wanted a picture of a female!' Then you come back and they say, 'but I only wanted the picture to be from the shoulders up!' That shit gets old fast.

In a comment that harkens back to the conundrum of the "double bind," Ken asked:

> When are they going to get around to telling us what they need to know to make this [PBL program] work? This is a real problem with administration--they have a vision, but they have no idea how to carry it out. Really good visionaries like Edison and Van Braun could go to their engineers and workers and say, 'This is what I want, I want it so long and so wide,

and I want it to have this much tolerance. . . .' It's like yesterday, we had [one of the organizational wide strategic planning meetings] with the dean, and none of those goals really spelled anything out.

Many mid-level administrators observed that the unclear direction from the upper level of administration regarding operational procedures has been a primary contributor to the "reign of chaos" in the organization since the dean arrived and the PBL program was introduced. As Bridget reflected:

> I think that my confusion and frustration comes from not having a clear idea from the top of 'who's on first,' who's in charge of what, who's gonna be accountable for what. And I know I'm not isolated in feeling like that. Most of the people at MWCOM feel this way. Everyone's roles have gotten shaken up and no one has bothered to redefine their roles. [The roles] have either doubled or tripled, or people are responsible for things outside their area. So everybody's role has changed, and while I think there's some good in that, many people I have spoken with have felt extremely frustrated by the lack of clear direction from the top.

Mid-level administrator Paula lamented that the "sheer mess" caused by the "lack of any kind of support from the top" seriously compromised her ability to perform her job. As Paula related:

> I mean you're exhausted, you're tired, you don't have the energy because you don't have the time to sit and plan that you used to, or problem-solve, or do any creative thinking. You're just putting out fires. Everything is reaction. None of it is just creative or premeditated. You feel like you're flying by the seat of your pants, because the bottom line is that you're just trying to keep up with [housekeeping details]. So who can sit down and think about interesting ways to prepare a lesson?

In addition to the turbulence caused by the lack of direction from upper-level administrators, several organizational members alluded to the political upheaval in their explanations of the "incessant commotion" which occurred in day-to-day life at MWCOM. For example, Erin observed that "the political and process issues have really added to this confusion and people feeling burned out and overwhelmed."

Perhaps mid-level administrator Alice expressed the organizational feeling best in her comments on the pervasiveness of the chaotic atmosphere at MWCOM:

> I really think this is universal--you talk with clinicians, they are feeling this way. You talk with administrators, they are feeling this way. You talk with people in classified positions such as clerical, they are feeling this way. So there's this feeling of constant, constant upheaval.

Regardless of the causes of the chaos, and despite the disorderly atmosphere the chaos generated at MWCOM, a number of mid-level members commented that the melange had engendered some positive effects on the organizational culture. For example, Forest observed:

> [The implementation of the PBL program] 'mess and all' makes complacent people stretch and get out of their comfort zones. If something doesn't work this gives people a chance to make it work better. That's the kind of philosophy you need to keep having, although it takes a lot of energy.

Additionally, faculty member/physician Jared observed that the organizational upheaval was:

> An exercise in building character. . . .There's nothing like things bouncing off the walls to see people's insecurities rise to the surface. I mean they come across as being really secure but when upheaval comes along, people who might have seemed like they were made of stone just come undone.

In comments which paralleled earlier observations that the PBL philosophy encouraged intellectual development in students, Bridget noted that the "uncomfortable state of flux" at MWCOM was beneficial in terms of "making people grow and become more flexible," as well as in terms of helping them "learn how to adapt to uncertainty and change more quickly." Additionally, Bridget acknowledged that the confusion helped "in the short run to get lots done in a small amount of time." Despite her own positive comments and the optimistic philosophies expressed by the others, however, Bridget admits that the chaotic culture "has taken its toll and some folks think they've stretched just about as far as they can."

In this section, which has been framed the literature addressing entropic family systems–we have discussed how the organizational members at MWCOM interpret much of the organizational action involving the PBL in terms of a "deliberate chaos," which, as many contend, communicates a clear political agenda on the part of the dean to limit resistance to the innovation by either "keeping people in the dark" or by "muddying the waters." We have also brought to light organizational members' perception of a chaos which communicates an inability on the part of the upper administration to address the resource problems which the PBL has created for organizational members. Despite some organizational members' remarks that messy change can have positive effects, it is clear that both types of chaos contributed to an organizational culture in which one of the dominant feelings among members was chronic unease, as well as an abiding distrust of the organizational leaders.

## Conclusion

In this paper, we have discussed how individuals at MWCOM used the overarching metaphor of "family" to symbolically represent their accounts of how problem-based learning was introduced and subsequently integrated into their organizational culture.

Through the narration of their accounts, organizational members illustrated incompatible views of the changing MWCOM culture as the pedagogical innovation of PBL was diffused throughout the organization.

The observations of these organizational members recall a large array of family issues ranging from "sibling rivalry" to "a family divided." Of particular relevance within this body of metaphors is the fact that most organizational members discussed the "MWCOM family" in terms of the family strife caused by resource problems. Additionally, two strong subthemes--the "double bind" and "chaos"--emerged from the narratives. These subthemes are consistent with both the family communication literature and the family psychology literature, and thus, provide support for the primary metaphoric theme of "family" which emerged from the organizational members' accounts.

Our specific aim in this study was to gain an understanding of how organizational members symbolically co-constructed their culture during the implementation of an innovative educational program. It is our hope that the descriptive/thematic analysis described in this paper lays the foundation for a critical analysis which directs attention to the complex and shifting power relationships embedded within the MWCOM culture during the implementation period of this particular innovation diffusion process. Indeed, we maintain that it is only by studying how the members of MWCOM construct their perceptions organizational life that we can take the "critical next step" toward forging a more meaningful look at the often politically charged meaning systems that stifle some organizational members while privileging others. Such an enterprise is useful not only for the members of MWCOM, it can help those in other organizations who are experiencing similar changes deal more productively with the problems that confront them.

References

Akin, G. & Schultheiss, E. (1990). Jazz bands and missionaries: OD through stories and metaphor. Journal of Managerial Psychology, 5, 614-623.

Barker, J.R. (1993). Tightening the iron cage of control: Concertive control in self-managing teams. Administrative Science Quarterly, 38, 408-437.

Barker, J.R., & Cheney, G. (1994). The concept and practices of discipline in contemporary organizational life. Communication Monographs, 61, 19-43.

Barrows, H.S. (1985). How to design a problem-based curriculum for the preclinical years. New York: Springer Publishing Company.

Bateson, G., Jackson, D.D., Haley, J., & Weakland, J. (1956). Toward a theory of schizophrenia. Behavioral Science, 1, 251-264.

Bensimon, E.A. (1989). The meaning of "good presidential leadership": A frame analysis. Review of Higher Education, 12, 48-60.

Boland, R.D., & Greenberg, R.H. (1988). Metaphorical structuring of organisational ambiguity. In L.R.Pondy, R.D. Boland, & H. Thomas, H. (Eds.), Managing ambiguity and change (pp. 149-160). New York: Wiley.

Bolman, L.G., & Deal, T.E. (1991). Reframing organizations: Artistry, choice, and leadership. San Fransico, CA: Jossey-Bass Publishers.

Boss, P.G. (1988). Family stress Management. Newbury Park, CA: Sage.

Brink, T.L. (1993). Metaphor as data in the study of organizations. Journal of Management Inquiry, 2, 336-350.

Broussine, M., & Vince, R. (1996). Working with metaphor towards organisational change. In C. Oswick, & D. Grant, (Eds.), Organisation development: Metaphorical explorations (pp. 57-70). London: Pitman Publishing.

Burrell, N.A., Buzzanell, P.M., & McMillan, J.J. (1992). Feminine tensions in conflict situations as revealed by metaphoric analyses. Management Communication Quarterly, 6, 115-149.

Carter, B., & McGoldrick, M. (1988). Overview, the changing family life cycle: A framework for family therapy. In B. Carter & M. McGoldrick (Eds.), The changing family life cycle (2nd ed). New York: Gardner Press.

Doubuzinski, L. (1992). Modernist and postmodernist metaphors of the policy process: Control and stability vs. chaos and reflexive understanding. Policy Sciences, 25 (4).

Duvall, E. (1988). Family development's first forty years. Family Relations, 37, 127-134.

Fitzpatrick, M.A., & Badzinski, D.M. (1985). All in the family: Interpersonal communication in kin relationships. In M.L. Knapp & G.R. Miller (Eds.), Handbook of interpersonal communication (pp. 687-736). Beverly Hills, CA: Sage.

Foss, S.K., Foss, K.A., & Trapp, R. (1991). Contemporary perspectives on rhetoric. Prospect Heights, IL: Waveland Press.

Galvin, K.M., & Brommel, B.J. (1991). Family Communication: Cohesion and change. (3rd ed.). New York: HarperCollins Publishers, Inc.

Garud, R., & Kotha, S. (1994). Using the brain as a metaphor to model flexible production systems. Academy of Management Review, 19, 390-416.

Gergen, K.J. (1991). The saturated self: Dilemmas of identity in contemporary life. United States of America: Basic Books.

Glick, P. (1989). The family life cycle and social change. Family Relations, 38, 123-129.

Goodall, H.L. (1988). Casing a promised land: The autobiography of an organizational detective as cultural ethnographer. Carbondale, IL: Southern Illinois University Press.

Goodall, H.L. (1991). Living the rock 'n' roll mystery: Reading context, self, and others as clues. Carbondale, IL: Southern Illinois University Press.

Hall, A.D., & Fagan, R.E. (1968). Definition of system. In W. Buckley (Ed.), Modern systems research for the behavioral scientist (pp. 81-92). Chicago: Aldine.

Heifetz, M.L. (1993). Leading change, overcoming chaos: A seven stage process for making change succeed in your organization. Berkely, CA: Ten Speed Press.

Hill, R. (1986). Life cycle stages for types of single parent families. Family Relations, 35, 19-29.

Hohn, C. (1987). The family life cycle: Needed extension of the concept. In T.K. Burch & K.W. Wachter (Eds.), Family demography: Methods and their application (pp. 156-180). New York: Oxford University Press.

Jordan, W.A. (1996). Crossfire education: Metaphor, cultural evolution & chaos in the schools. Lanham, MD: University press of America.

Kaufman, A. (Ed.). (1985). Implementing problem-based medical education: Lessons from successful innovations. New York: Springer Publishing Company.

Kaufman, A., Mennin, F.B., & Waterman, W. (1989). The New Mexico experiment: Educational innovation and institutional change. Academic Medicine, 64, 285-294.

Kendall, J.E., & Kendall, K.E. (1993). Metaphors and methodologies: Living beyond the systems machine. MIS Quarterly, 17, 193-206.

Koch, S., & Deetz, S. (1981). Metaphor analysis of social reality in organizations. Journal of Applied Communication Research, 9, 1-15.

Kramer, J. (1985). Family interfaces: Transgenerational patterns. New York: Brunner/Mazel.

Laing, R.D. (1972). The politics of the family. New York: Vintage Books.

Lakoff, G. & Johnson, M. (1980). Metaphors we live by. Chicago: University of Chicago Press.

Lakoff, G. & Johnson, M. (1987). Women, fire, and dangerous things. Chicago: University of Chicago Press.

Larkey, L., & Morrill, C. (1995). Organizational commitment as symbolic process. Western Journal of Communication, 59, 193-213.

Lundberg, C.C. (1990). Towards mapping the communication targets of organisational change. Journal of Organizational Change Management, 3, 93-99.

Marshak, R.J. (1993). Managing the metaphors of change. Organisational Dynamics, 22, 77-97.

Marx, R.D., & Hamilton, E.E. (1991). Beyond skill building: A multiple perspectives view of personnel. Issues and Trends in Business and Economics, 3, 313-340.

Maxcy, S.J. (1995). Democracy, chaos, and the new school order. Thousand Oaks, CA: Corwin Press.

McCubbin, H.I., & Patterson, J.M. (1985). Adolescent stress, coping, and adaptation: A normative family perspective. In G.K. Leigh & G.W. Peterson (Eds.), Adolescents in families (pp. 256-276).

McKenry, P.C., & Price, S.J. (Eds.). (1994). Families and change: Coping with stressful events. Thousand Oaks, CA: Sage.

Merry, U. (1995). Coping with uncertainty: Insights from the new science of chaos, self-organization, and complexity. Westport, CN: Praeger.

Montgomery, J., & Fewer, W. (1988). Family sytems and beyond. New York: Human Sciences Press.

Moore, G.T., Block, S., Briggs, Y, & Mitchell, R. (1994). A randomized controlled trial evaluating the impact of the New Pathway Curriculum at Harvard Medical School. Report to the fund for the improvement of post-secondary education. Cambridge, MA: Harvard Medical School.

Moore-West, M., & O'Donnell, M.J. (1985). Program evaluation. In A. Kaufman, (Ed.), Implementing problem-based medical education: Lessons from successful innovations (pp. 45-86). New York: Springer Publishing Company.

Morgan, G. (1986). Images of organization. Newbury Park, CA: Sage.

Morgan, G. (1993). Imaginization: The art of creative management. Newbury Park, CA: Sage.

Mumby, D.K. (1993). Critical organizational communication studies: The next ten years. Communication Monographs. 60, 18-25.

Noller, P., & Fitzpatrick, M.A. (1993). Communication in family systems. Englewood Cliffs, NJ: Prentice Hall.

Papa, M.J., Auwal, M.A., & Singhal, A. (1997). Organizing for social change within concertive control systems: Member identification, empowerment, and the masking of discipline. Communication Monographs, 3, 219-249.

Peters, T. (1992). Liberation management. London: Macmillan.

Peters, T.J., and Waterman, R.H. (1982). In search of excellence: Lessons from America's best run companies. New York: Harper & Row.

Philipsen, G. (1989). An ethnographic approach to communication studies. In B. Dervin, B.J. O'Keefe, & E. Wartella (Eds.), Rethinking communication: Vol. 2 (pp. 258-268). Newbury Park, CA: Sage.

Proctor, R.A. (1989). The use of metaphors to aid the process of creative problem-solving. Personnel Review, 10, 11-27.

Rogers, E.M. (1995). Diffusion of innovations. (Rev. ed.). New York: The Free Press.

Satir, B. (1972). Peoplemaking. Palo Alto, CA: Science and Behavior books.

Smith, R.C., & Eisenberg, E.M. (1987). Conflict at Disneyland: A root-metaphor analysis. Communication Monographs. 54, 367-380.

Spradley, J.P. (1979). The ethnographic interview. New York: Holt, Rinehart & Winston.

Stewart, A. (1990). The bigman metaphor for entrepreneurship: A "library tale" with morals on alternatives for further research. Organisation Science, 1, 77-98.

Tsoukas, H. (1993). Analogical reasoning and knowledge generation in organization theory. Organization Studies, 14,345-360.

Watson, T.J. (1994). In search of management: Culture, chaos and control in managerial work. London: Routledge.

Watzlawick, P., Bavelas, J.B., & Jackson, D.D. (1967). Pragmatics of human communication: A study of interactional patterns, pathologies, and paradoxes. New York: W.W. Norton & Company.

Yanow, D. (1996). How does a policy mean?: Interpreting policy and organizational actions. Washington: Georgetown University Press.

Appendix A

Interview Schedule

1) Tell me about when you first heard that there was a possibility of PBL being implemented in this organization.

2) Describe for me your position on PBL.
   A. How do you feel about the philosophy which undergirds it?
   B. Tell me whether or not you feel it is the "wave of the future."
   C. Tell me what place you feel PBL has in this organization.

3) Describe for me your perception of how the implementation of PBL into this organization has been supported by the organizational members.
   A. Do you feel it has received the support of all members?
   B. Why? Why not?
   C. Can you recall some incidents when members have/have not shown their support?
      i. subtle ways
      ii. overt ways

4) Do you perceive that members espousing one particular point of view (e.g. systems vs. PCC) have more or less power within the organization than those espousing the other point of view?

5) What kinds of signs/symbols help you come to this perception?

6) Can you recall instances when certain organizational members' opinions about PBL have changed since it was first introduced?

7) How does this innovation fit in to the way we do things within this organization?
   A. How does it affect the way we interact with each other as organizational members/
   B. How does it affect the way we interact with students?
      i. How does PBL "square" with the notion that "traditional pedagogy" in medical school is a "rite of passage?"

8) Overall, would you say that the implementation of the PCC into MWCOM has been a smooth one? Why? Why not?

9) If you had to come up with a metaphor describing MWCOM (particularly with regard to the way it has been since the implementation of PBL), what kinds of things would you come up with?

## Appendix B

### Foucault's Ideas on the Micro Processes of Discipline

Foucault's work, while it is not a method *per se*, is helpful for the critical ethnographer in terms of achieving such a task. However, I have not acknowledged the particular way I was going to approach the critical element of this study from a Foucauldian perspective. After providing for the reader a brief review of Foucault's investigation of power, I will explain Foucault's explication of the mechanisms of discipline, which provide the frame for my critical analysis.

As Rouse (1993) observes, Foucault had been writing about the history of knowledge in the human sciences long before he ever expressly raised questions about power. However, as a nominalist, what most interested Foucault was what had been written about particular epistemic contexts within which bodies of knowledge became understandable and authoritative. Indeed, as Rouse notes, Foucault argued that particular investigations were structured by those concepts and statements which were understood together, how those statements were organized thematically, which of those statements counted as serious, who was empowered to speak seriously, and what questions and procedures were relevant to assess the credibility of those statements that were taken seriously. Foucault, whose exploration also included the objects under discussion, terms such historically situated fields of knowledge "discursive formations."

Gutting (1989) notes that Foucault's commitment to nominalism resonated with post-modernist and critical theorists alike because his inquiry into the structure of such discursive formations allowed for the possibility that significant changes can occur in the organization of a particular discursive field. Therefore, what might count as a serious and important claim at one time might be dismissed at another time.

Foucault's earlier work focused primarily on such significant changes in the "discursive formations" which governed the serious possibilities for talking about things. Foucault posited that historical archives revealed important changes which had taken place in what counted as earnest discussion of madness, disease, wealth, language, or life. Yet, Foucault's goal was not to explain such shifts, but rather to demonstrate the structural differences they embody, and to a certain extent, to document the parallels between contemporary shifts in several discursive formations. Rouse (1993) contends that Foucault was particularly concerned about demonstrating the parallel shifts in several

discursive fields in the eighteenth and nineteenth centuries, through which the modern sciences of human beings replaced the classical tables of representation that displayed the order of things.

As a host of scholars (e.g., Armstrong, 1992; Gutting, 1989, 1994; Rabinow, 1984) observe, Discipline and Punish expanded the scope of Foucault's inquiries into the modern reconfiguration of knowledge. His earlier studies had often associated the reconfiguration of discursive fields with the organization of new institutions, for example, asylums, clinics, and hospitals. Nevertheless, as Gutting (1994) points out, Foucault's emphasis remained on discourse. In Discipline and Punish, however, the eighteenth-nineteenth century transformation of the human sciences was explicitly set in the context of practices of discipline, surveillance, and constraint, which made possible new kinds of knowledge of human beings even as they created new forms of social control.

One of the most important transformations that Foucault described was the scale and continuity of the exercise of power, which also involved a much greater knowledge of detail. Foucault was interested in the difference between massive but infrequent exercises of destructive force (e.g., public executions, military occupations, and the violent suppression of insurrections) and the uninterrupted constraints imposed upon practices of discipline and training. As Foucault posits:

> It was a question not of treating the body, en masse, 'wholesale,' as if it were an indissociable unity, but of working it 'retail,' individually; of exercising upon it a subtle coercion, of obtaining holds upon it at the level of the mechanism itself--movements, gestures, attitudes, rapidity; an infinitesimal power over the active body. (Discipline and Punish, 1977, p. 136-137)

Thus, Foucault argues that certain ways of exercising force can only coerce or destroy their target, but discipline and training can reconstruct the target to produce new gestures, actions, habits and skills, and ultimately new kinds of people. As Foucault (1977) notes:

> The human body was entering a machinery of power that explores it, breaks it down and rearranges it. . . .It defined how one may have a hold over others' bodies, not only so that they may do what one wishes, but so that they may operate as one wishes, with the techniques, the speed and the efficiency that one determines. Thus discipline produces subjected and practiced bodies, "docile" bodies. (p. 138)

Foucault (1977) observed that the systematic discipline proceeds in four primary ways. First, by the spatial distribution of individuals in certain ways. Most often this is done by enclosure. In the case of the prisoner or the

psychiatric patient, the criminal/patient is separated from others in the community by being confined to a single place. However, the distribution of space is also achieved by partitioning certain groups of individuals from others (e.g., students from workers); or by integrating individuals within machines of production housed in the same space (e.g., the architectural plan of a factory; or again by a network of relations of rank (e.g., officers separated from other ranks in military barracks). Foucault observes that it is through such procedures that individuals understand their position in the general economy of space associated with disciplinary power.

A second manifestation of discipline at work is the way the control of activities is brought into effect. As Foucault argues, one of the characteristics of disciplinary power is its tendency to extract "time and labor" rather than "wealth and commodities" from bodies. The control of activity is one of the primary ways by which "time" can be "extracted" from bodies. Foucault points out examples such as work schedules, adjusting movements such as marching to temporal stages, by correlating bodily positions and gestures such as the maneuver associated with the mundane act of good penmanship.

Foucault (1977) asserts that discipline is not guided by the principle of non-idleness or the imperative to not "waste" time. Rather discipline seeks "to intensify the use of the slightest moment;" it is a matter of breaking down a set period of time into "ever more available moments" (p. 154). Moreover, Foucault notes that discipline seeks to control the activities of the body precisely because it recognizes that the body is not "mechanical." Instead, discipline conceives of the body as "natural. . . .[T]he bearer of forces and the seat of duration" (p. 155). The body does not automatically align itself into a clockwork composition of actions; it must be trained to do so. Thus, Foucault argues that we cannot claim that discipline is guided by a "false" or ideological conception of the human body. Rather, it actively seeks to cultivate a certain type of body on the basis of knowledge considered to be true.

Third, Foucault notes that discipline additionally concerns the organization of segments or stages of training--a concern which is directly relevant to pedagogical practices. Disciplinary power develops a general code for the transition from student to master, put into practice in various fields of learning. In this stage discipline codifies segments in terms of hierarchy, where each stage of the learning process is significantly more difficult than the last. This process enables the development of skills to be carefully monitored while also providing a way to differentiate, or to individualize novices.

Finally, discipline brings into effect a general co-ordination of all elementary parts. Foucault (1977) observes that such a combination requires that the training procedures directed at the human body are integrated into a more general "machinery," that chronological series also become pieces of the machinery, and that a precise system of commands is activated. In order to achieve this co-ordination, discipline relies on what Foucault terms "tactics." Such tactics ensure that "the product of the various forces is increased by their calculated combination" (p. 70).

McHoul and Grace (1995) note that although critics often charge that Foucault's conception of institutions is "excessively functional or anonymous and leaving no room for conscious agency" such criticisms are unwarranted. McHoul and Grace argue instead that Foucault views an institution as being comprised of opposing forces which can be compared to a state of war. Disciplinary institutions thus require an ever-alert attention to the "government of all composite parts and the invention of certain tactical manoeuvres to ensure the implementation of disciplines" (p. 70).

Indeed, Foucault (1977) argues that politics, if not exactly and directly a state of war, uses the military model as a fundamental means of "preventing civil disorder" (p. 178). By using the term "discipline" to designate such training procedures, Foucault stresses the connections between the techniques of power and the forms of knowledge that develop alongside them. As mentioned previously, knowledge gained on the basis of disciplinary power is formulated according to "norms" of behavior. However, for Foucault, the primary issue is the types of instruments and procedures that harness the accumulation of knowledge--particularly the fact that they all involve some form of unequal social interaction between two parties or agents. For example, in the case of examinations, it is only the subject of power who undergoes this trial; it is set by someone already possessing the skills or knowledge the other is seeking.

Foucault is quick to point out that the processes of normalization associated with disciplinary power do not necessarily produce conformity. Indeed, one of the most significant points about Foucault's views on power is that one of the primary effects of disciplinary power is to produce, precisely, individuality. Thus, although the intention may be to produce regularity, the effect is the opposite--a multiplicity of disparate and variegated identities. individuality is a modern phenomenon--just as, conversely, the supposedly liberatory demand for the recognition of "individuality" and "difference" springs from the same source. Indeed, Foucault (1980) stresses that this ironic consequence is an important point and a central feature of his conception of subjectivity:

The individual is not to be conceived as a sort of elementary nucleus, a primitive atom, a multiple and inert material on which power comes to fasten or against which it happens to strike, and in so doing subdues or crushes individuals. In fact, it is already one of the prime effects of power that certain bodies, certain gestures, certain discourses, certain desires, come to be identified and constituted as individuals. The individual, that is, is not the vis-à-vis of power; it is, I believe, one of its prime effects. (p. 98)

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